African Invertebrates 58(1): 49–64 (2017)
doi: 10.3897/AfrInvertebr.58.12022
http://africaninvertebrates.pensoft.net

RESEARCH ARTICLE

African Invertebrates
A journal of biodiversity research

Records of the genus *Micrambe* Thomson, 1863 (Coleoptera, Cryptophagidae) from Madagascar and Réunion Island

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Academic editor: *P. Stoev* | Received 31 January 2017 | Accepted 9 March 2017 | Published 28 March 2017

http://zoobank.org/85B33001-E082-488E-9D97-81F8CE14A3C8

Citation: Otero JC, Pereira JM (2017) Records of the genus *Micrambe* Thomson, 1863 (Coleoptera, Cryptophagidae) from Madagascar and Réunion Island. African Invertebrates 58(1): 49–64. https://doi.org/10.3897/AfrInvertebr.58.12022

Abstract

A study on the genus *Micrambe* Thomson, 1863 (Coleoptera, Cryptophagidae) from Madagascar and Réunion is presented. Six species are hitherto known from these countries: *M. apicalis* Grouvelle, *M. brevitarsis* Bruce, *M. consors* Grouvelle, *M. madagascariensis* Grouvelle, *M. modesta* (Grouvelle), and *M. reuninensis* Lyubarsky. A new species, *M. leonardoi* sp. n., is formally described from Boorg-Murat, Réunion Island. A key is presented to enable their identification. *Micrambe consors* Grouvelle previously known only from Congo is reported here for the first time from Madagascar.

Keywords

Taxonomy, Madagascar, Réunion Island, *Micrambe leonardoi* sp. n., new records, taxonomic key

Introduction

A review of the papers on African Cryptophaginae by Bruce (1952, 1959, 1963, 1965), Grouvelle (1896, 1906), Scott (1935) and Coombs and Goodroffe (1955) shows the great diversity and endemicity of the genera and species of this subfamily of Cryptophagidae. Bruce is the author of some papers on African Cryptophaginae (1957) and,

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surprisingly, only a few studies (1952, 1959, 1963, 1965) list some of the species of the "island domain of the Indian Ocean" (sensu Paulian 1961). Therefore, the few reviews of species from Madagascar and the Mascarene Islands (description of new species and identification keys) are by Bruce (op. cit), Grouvelle (1896, 1906) and Lyubarsky (2013).

In general, the male genitalia of Madagascar and Réunion Island species are less valuable as a guide to identity than in the case of European fauna. Although some species are very distinct, many conform to a basic pattern without showing any significantly characteristic features.

As only a limited number of specimens collected in this region have been studied, data are scarce and fragmentary. From some islands (e.g. Comores), it has been possible to examine any material in spite of the collections done either in different scientific studies or individually. Due to this, specimens from these groups could not be collected. As for the species in this region, only scattered data of their capture are known. Thus, only fragmentary data exist on the habitat associations of some species.

Methods

The terminology and the measurements of the new species follow Otero and Lopez (2011): **L** = length, **WL** = width/length ratio, **E** = eccentricity of the eyes (width/half of the length). The width is measured across the widest part of a line joining the anterior and posterior limit of the eye. Length is the maximum length of the eye. L is used for length in dorsal view, W for width and Ø for diameter.

Institutional abbreviations

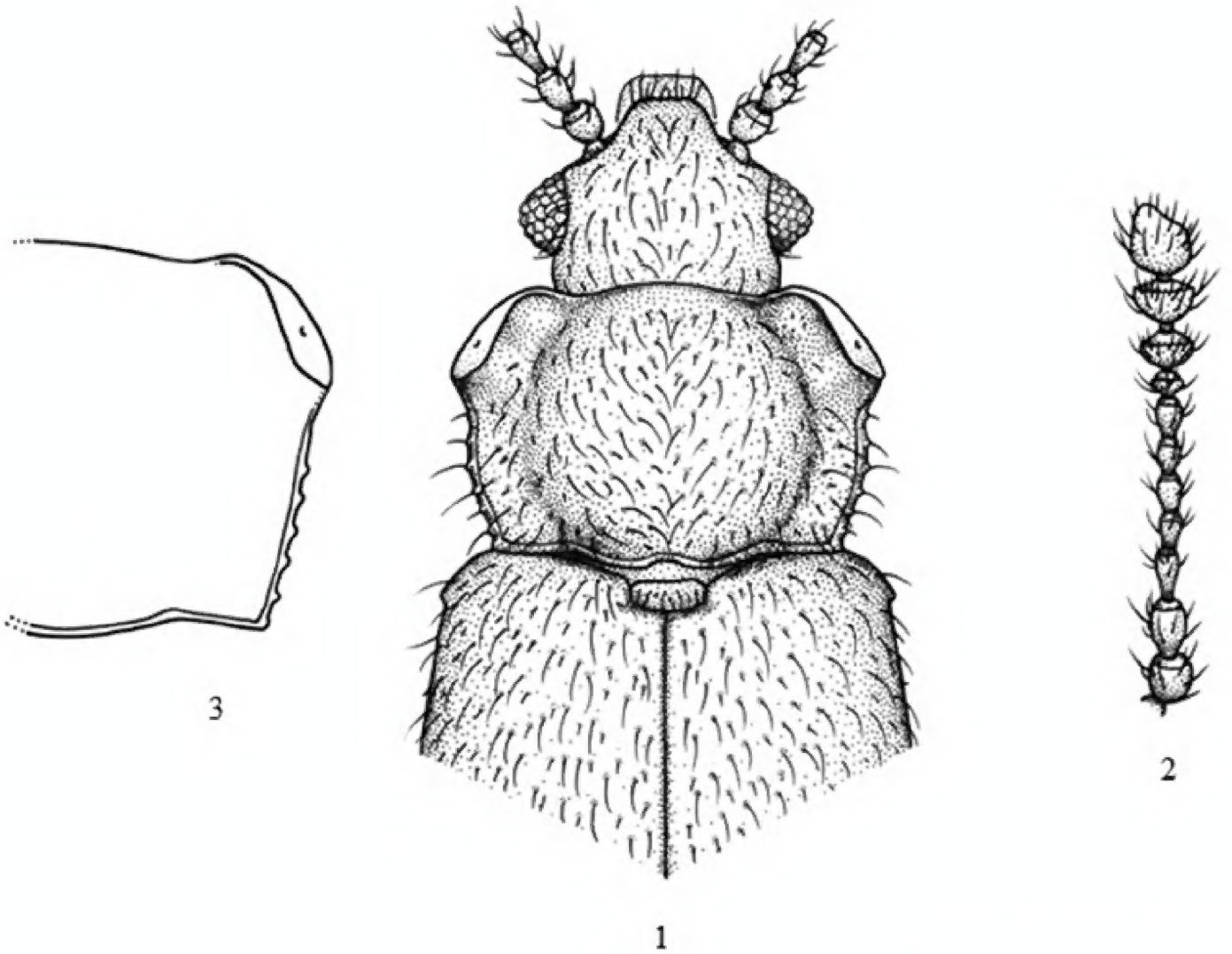
BMNH: British Museum of Natural History, London, United Kingdom; **MHNG:** Muséum d'Histoire Naturelle, Genève, Suisse (coll. Y. Gomy); **MNHN:** Museum National d'Histoire Naturelle, Paris, France; **SMNS:** Staatliches Museum fur Naturkunde, Stuttgart, Germany; **MSNF:** Museo di Storia Naturale, Firenze, Italy (coll. Bartolozzi); **NHMW:** Naturhistorisches Museum Wien, Vienna, Austria; **RMCA:** Royal Museum Central Africa, Tervuren, Belgium; **TMSA:** Transvaal Museum, Pretoria, South Africa; **USC:** University of Santiago de Compostela, Spain.

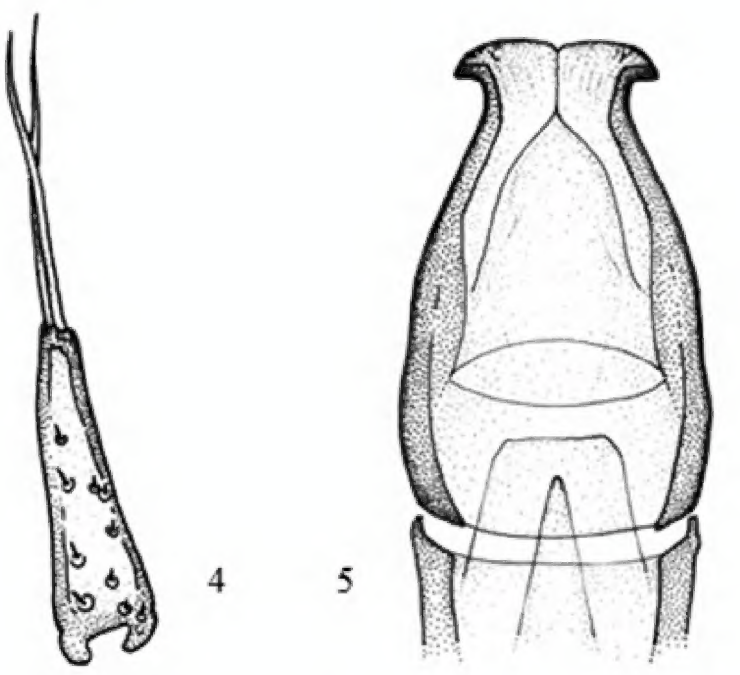
Taxonomy

Micrambe apicalis Grouvelle, 1906

Figures 1–5

Micrambe apicalis Grouvelle, 1906; Ann. Soc. entomol. Fr., 75: 141





Figures 1–5. *Micrambe apicalis*: **1** General view **2** antenna **3** pronotum **4** paramere **5** aedeagus.

Material examined. Holotype ♂. Madagascar. C. 4 km N. of Ambohimahamasoa (forêt Fianaratsoa) 1200-1300 m; 22. III. 1996, 1 ♂ (leg. J. Janak and P. Moravec) (MHNG). Prov. Tamatave, Moramanga env. 25-27. XI. 1995, ♂ (leg I. Jenis) (MHNG). Tananarive, 6–13.X.1970, 1 ex (coll. P. Hammond) (BMNH).

Additional material not examined. Madagascar. Forêt de Tanala (MNHN, not found).

Redescription. Length: 1.5–1.6 mm. Body oblong and convex. Reddish grey-brown; 9th and 10th antennomeres dark. Double pubescence (L = 0.041–0.048 mm). Metathoracic wings fully developed.

Head slightly transverse, squared or sub-squared (WL = 1.4). Punctation strong and dense. Punctures separated by a shorter distance than their diameter (Ø = 0.015–0.017 mm). Eyes average, hemispherical and slightly protruding (E =0.8). Eye facets smaller (Ø = 0.010–0.013 mm) than head punctures. Long antennae (Fig. 2) (L = 0.615 mm) surpassing the base of the pronotum. 2nd antennomere as wide as 1st and 0.7 times longer; 4th to 7th almost identical and 0.6 times shorter than 3rd; 8th transverse.

Pronotum (Figs 1, 3) slightly transverse (WL = 1.7). Anterior margin slightly curved; lateral margins converging in a regular curve towards the base. Large callosity (1/3 as long as the side). Callosity face clearly visible from above. Gland pore visible. Callosity margin strong, forming an obtuse angle rearwards and a 31°–32°angle with the body axis. Posterior angles obtuse. Basal groove and foveae present. Punctation less distinct than that of the head; distance between punctures shorter than their diameter (Ø = 0.011–0.016 mm).

Elytra 1.5 times longer than wide; wider than pronotum. Punctation more widely spaced than that of the pronotum; distance between punctures longer than their diameter (Ø = 0.011–0.016 mm).

Aedeagus (Fig. 5) (L = 0.145 mm) expanded apically and widened in its basal half. Endocephalic orifice visible, truncated in the apex and located in the basal third of the aedeagus. Endophallic armour made up of numerous minute spines. Parameres (Fig. 4) elongated, triangular (L = 71.98 µm; A = 27.98 µm). Few pores either with or without setae. Two long (L = 45.62–68.11 µm) apical setae.

Biology. Captured in the months of March, October and November in rain forests.

Distribution. Madagascar (Grouvelle 1906).

Micrambe brevitarsis Bruce, 1963

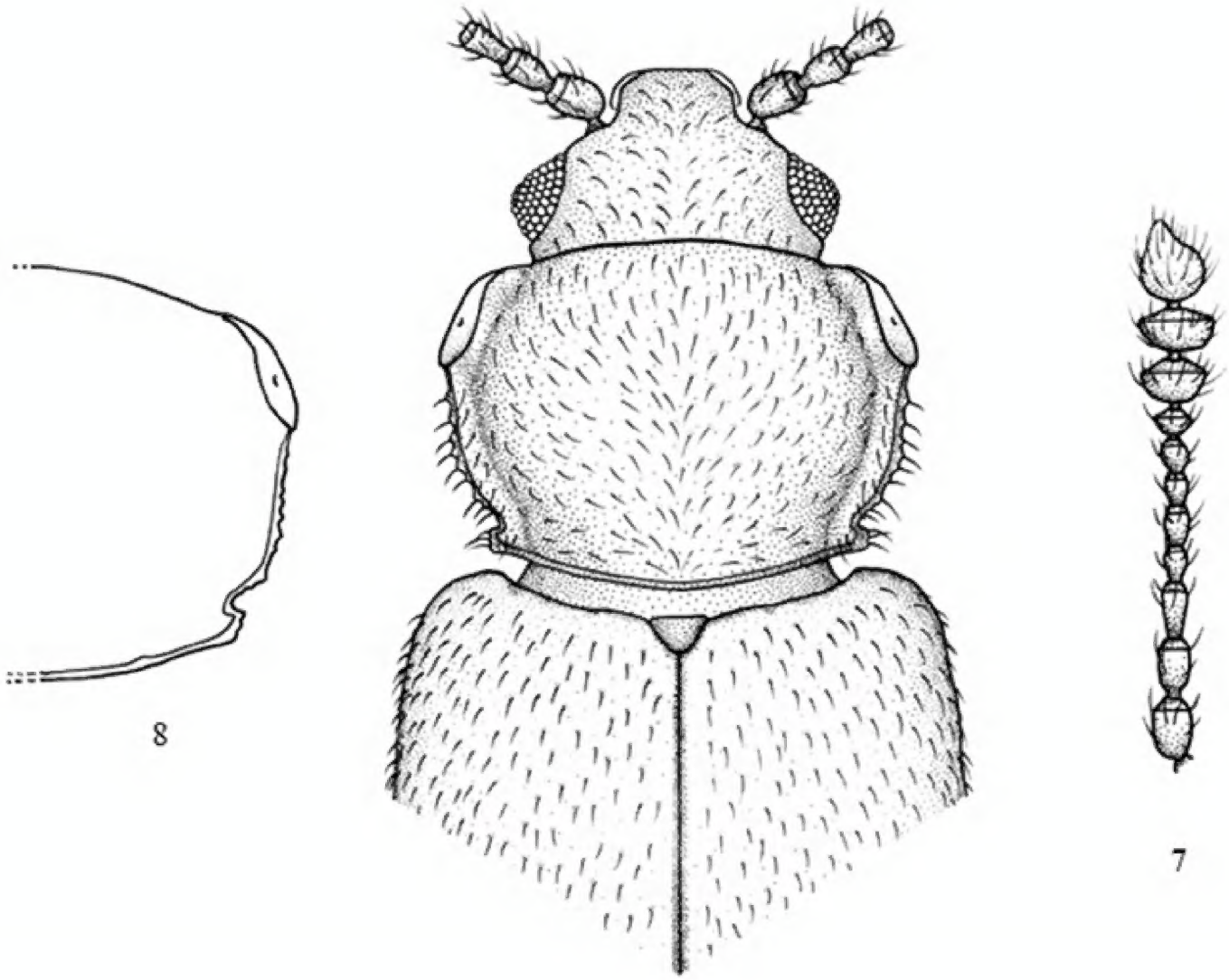
Figures 6–8

Micrambe brevitarsis Bruce, 1963; Rev. Zool. Bot. Afr., 67: 216

Material examined. Holotype ♂. (red card)/coll. Mus. Congo; Madagascar: forêt de Fito; ex coll. D. Breuning (white card)/Typus (red card)/ *Micrambe brevitarsis* n. sp; N. Bruce det. (white card) (RMCA).

Redescription. Length: 1.9 mm. Body elongated, oval and convex. Yellowish grey-brown. Simple pubescence flattened and long (L = 0.036–0.040 mm); some erected bristles on the margins and end of the elytra. Metathoracic wings fully developed.

Head slightly transverse (WL = 1.6–1.7). Punctation pronounced and dense distance between punctures shorter than puncture diameter (Ø = 0.005 mm). Eyes normal, sub-hemispherical, little protruding (E = 0.7–0.8) with larger facets (Ø = 0.0060–0.010 mm) than head punctures. Long antennae (Fig. 7) (L = 0.796 mm) surpassing



Figures 6–8. *Micrambe brevitarsis*: **6** General view **7** antenna **8** pronotum.

the pronotum base. 1st antennomere thick, cylindrical; 2nd narrower and almost as long as 1st; 4th, 6th and 7th identical and 1.5 times shorter than 2nd; 8th 1.3 times shorter than 7th; 9th and 10th strongly transverse; 11th 1.7 times longer than 9th.

Pronotum (Figs 6, 8) convex and moderately transverse (WL = 1.6–1.7). Anterior margin convex. Large callosity (1/3 of the side length), not protruding from the lateral margin of the pronotum. Callosity face visible from above. Gland pore visible. Callosity forming an obtuse angle posteriorad and a 25°-26°angle with the body axis. Lateral margins more or less parallel in the anterior 2/3 and converging in the basal third. Posterior angles obtuse. Basal groove visible. Soft punctation; distance between punctures shorter than puncture diameter (Ø = 0.006–0.010 mm).

Elytra 2.4 times longer than pronotum. Punctation finer and more scattered than that of the pronotum; distance between punctures greater than puncture diameter (Ø = 0.006–0.010 mm). 4th segment of hind tarsi of males smaller than in individuals of other species.

Aedeagus (in poor condition, broken and not figured) apically extended. Endophalic orifice visible. Parameres absent.

Biology. Unknown.

Distribution. Madagascar (Bruce 1963).

***Micrambe consors* Grouvelle, 1906**
Figures 9–13

Micrambe consors Grouvelle, 1906; Ann. Soc. entomol. Fr., 75: 140

Material examined. Holotype ♂. Coll. Mus. Congo/Madagascar: Amparafara/IV-V-1937/J. Vadon. *Micrambe consors* Grouvelle/N. Bruce det. 1 ♀: Coll. Mus. Congo/Madagascar: Amparafara/IV-V-1937/J.Vadon. /*Micrambe consors* Grouvelle/N. Bruce det. (RMCA).

Additional material examined. Réunion Island. Piton de la Founaise; 25. VIII. 1984, 2 ♂♂ (Leg. Made) (NHMW). Madagascar. Antsiranama, Antsahampano, Mte d'Ambre, 12.53°S; 49.17°E (DD), 15–19. XII. 2004, 1ex (BMNH); Tabnala, 40 km Ambositra, 14. XI. 2006, 4 exx (leg. Dr. Claudio) (MHNG).

Redescription. Length: 1.8–2.0 mm. Body oval, elongated and convex. Either yellowish or reddish grey-brown in its entirety; some specimens have only their head and pronotum reddish grey-brown. Pubescence simple, slightly thick and short (L = 0.019–0.022 mm). Metathoracic wings fully developed.

Head transverse (WL = 1.8–1.9). Punctation well-marked, however not dense; distance between punctures greater than puncture diameter (Ø = 0.010–0.012 mm). Eyes normal, sub-hemispherical, moderately protruding (E = 0.9) with facets (Ø = 0.011–0.012 mm) as large as head punctures. Long antennae (Fig. 10) (L = 0.594 mm) reaching the base of the pronotum. 1st segment thick; 2nd ovoid, almost identical to 1st and 0.9 times larger than 3rd; 4th, 6th and 7th identical and 0.6 times shorter than 3rd; 9th and 10th transverse.

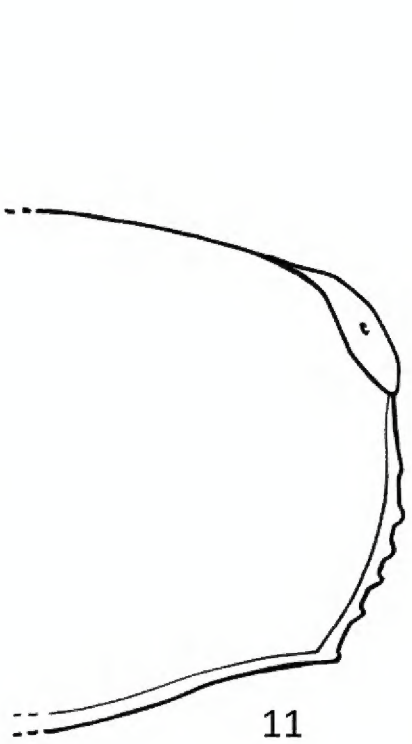
Pronotum (Figs 9, 11) convex and moderately transverse (WL = 1.8). Anterior margin curved. Lateral margins, from callosity to last third, more or less parallel and converging from here to the base. Large callosity (1/3 of side length) not surpassing the lateral margin of the pronotum. Callosity face visible from above. Gland pore visible, forming an obtuse angle rearwards and a 30°–31°angle with the body axis. Posterior angles obtuse. Basal groove visible. Basal foveae hardly visible. Punctation well-marked and dense; distance between punctures less than puncture diameter (Ø = 0.011–0.012 mm).

Elytra three times as long as pronotum. Elytra with finer and more scattered punctation than that of the pronotum. Distance between punctures greater than puncture diameter (Ø = 0.011–0.012 mm).

Aedeagus (Fig. 13) (L = 0.138 mm) apically extended. Lateral margin with a small protuberance on the basal third. Endophallic orifice not visible. Parameres very elongated, triangular (Fig. 12) (L = 0.080–0.090 mm). One or two apical setae (L = 39.28 μm). Scarce pores either with or without setae.

Biology. Adults collected in August, November and December, otherwise nothing else is known about the biology of this species.

Distribution. Madagascar, Amparafara (Bruce 1959); new record for Réunion Island.



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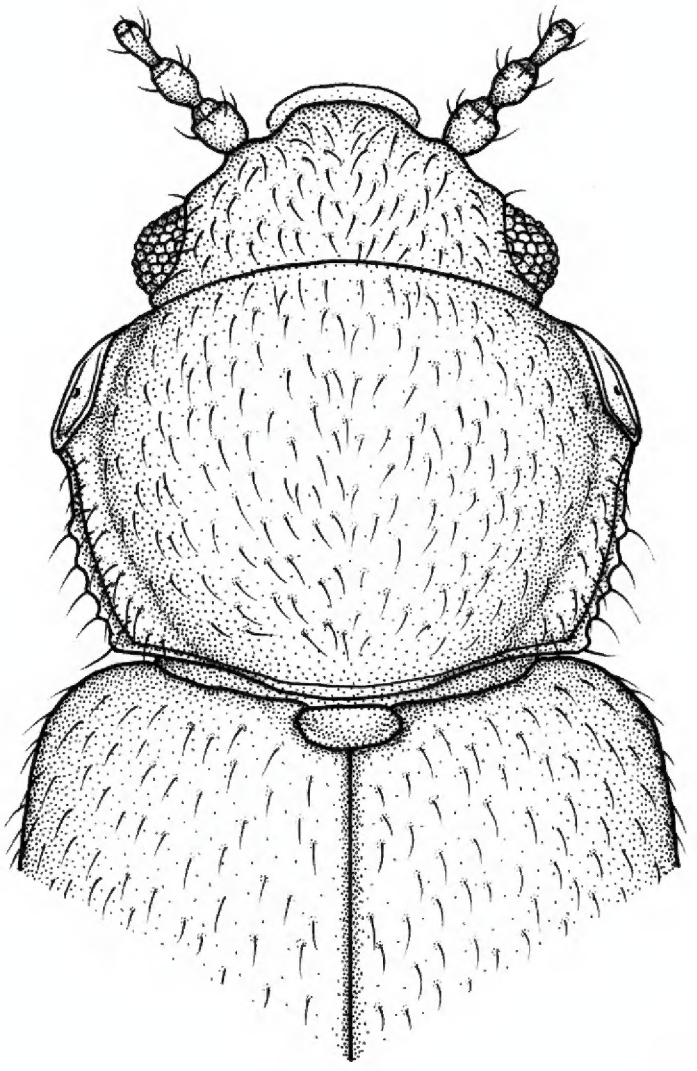

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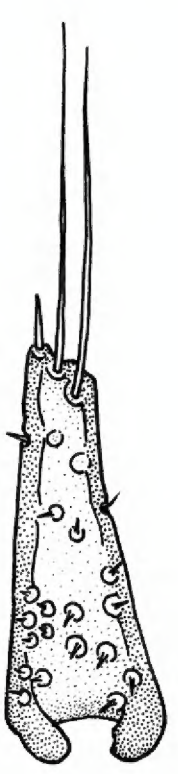

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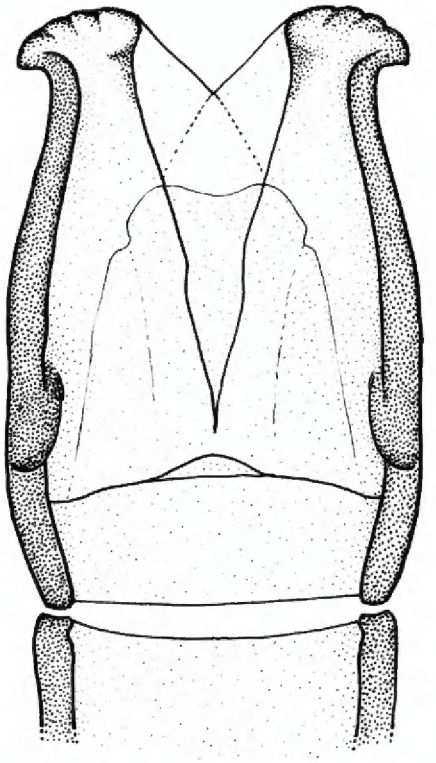

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Figures 9–13. *Micrambe consors*: **9** General view **10** antenna **11** pronotum **12** paramere; **13** aedeagus.

***Micrambe leonardoi* sp. n.**
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Figures 14–18

Type material examined. Holotype ♂. Réunion Island, Boorg-Murat, 21°12'49"S; 55°35'16"E (DMS), 1560 m, 8. III. 2000 (Legs. J. and I. Wiesner) placed in Coll. SMNS.

Paratypes. 2 ♀♀, same date and collector as holotype placed in Coll. SMN. 2 ♂♂ and 5 ♀♀. Réunion Island, Boorg-Murat, 21°12'49"S; 55°35'16"E (DMS), 1560 m, 5. I. 1998 (Legs. J. and I. Wiesner) 1 ♂ and 1 ♀ placed in Coll. J. C. Otero (USC).

Description. Length: 1.6–2.1 mm. Body oval, elongated and little convex. Either yellowish grey-brown or dark grey-brown; head and pronotum reddish grey-brown; appendages yellowish grey-brown. Pubescence simple, flattened and short (L = 0.040–0.060 mm). Metathoracic wings fully developed.

Transverse head (WL = 1.9–2.0). Punctation well-marked and dense; distance between punctures less than puncture diameter (Ø = 0.012–0.016 mm). Normal eyes (L = 0.115 mm), sub-hemispherical and protruding (E = 0.95–1.0). Eye facets (Ø = 0.008–0.010 mm) smaller than head punctures. Long antennae (Fig. 15) (L = 0.690 mm) reaching the posterior margin of the pronotum. 1st antennomere spherical and wide; 3rd as long as 2nd however narrower; 4th and 8th identical and 1.8 times shorter than 3rd; 5th, 7th and 9th almost identical and 1.4 times shorter than 3rd.

Pronotum (Figs 14, 16) slightly transverse (WL = 1.7). Anterior margin curved. Large callosity (1/3 of side length), barely protruding from the lateral margin of the pronotum. Callosity face "flattened" on the pronotum and clearly visible dorsally. Gland pore visible; forming an obtuse angle rearwards and a 27°–28°angle with the body axis. Lateral margins parallel until middle area and from there, converging to the base. Posterior angles obtuse. Basal foveae present. Punctation pronounced, dense but less apparent than on the head; distance between punctures less than puncture diameter (Ø = 0.014-0.018 mm).

Elytra 3.5 times as long as pronotum. Punctation finer and more scattered than that on the pronotum; distance between punctures greater than puncture diameter (Ø = 0.016–0.018 mm).

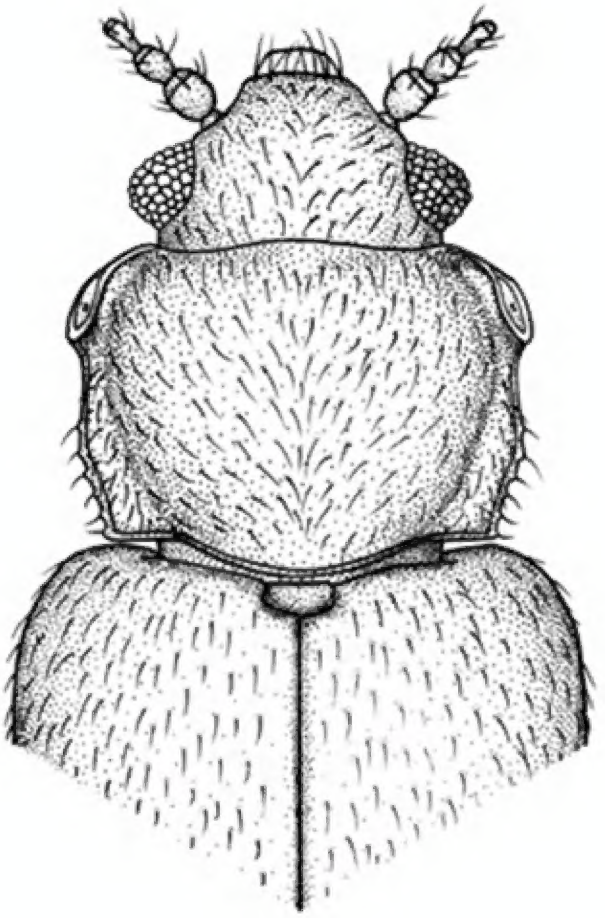
Aedeagus (Fig. 18) (L = 0.155 mm and A = 86.29 µm) apically extended. Preputial sac with a thin membrane. Basal third of lateral margins with a small protuberance. Endophallic orifice visible, located on the base of the aedeagus and apically truncated. Endophallic armour made up of small spines. Parameres (Fig. 17) (L = 64.67 µm and A = 23.27 µm). Numerous pores either with or without setae. Two long apical setae (L = 54.44–85.18 µm).

Etymology. Dedicated in honour of my grandson Leonardo Aller Otero.

Biology. On *Sophora demudata* Bory, *Antidesma madagascariense* Lam., in forests of *Acacia heterophylla* Lam. and *Philippia arborescens* Klotz.

Distribution. Réunion Island.

16



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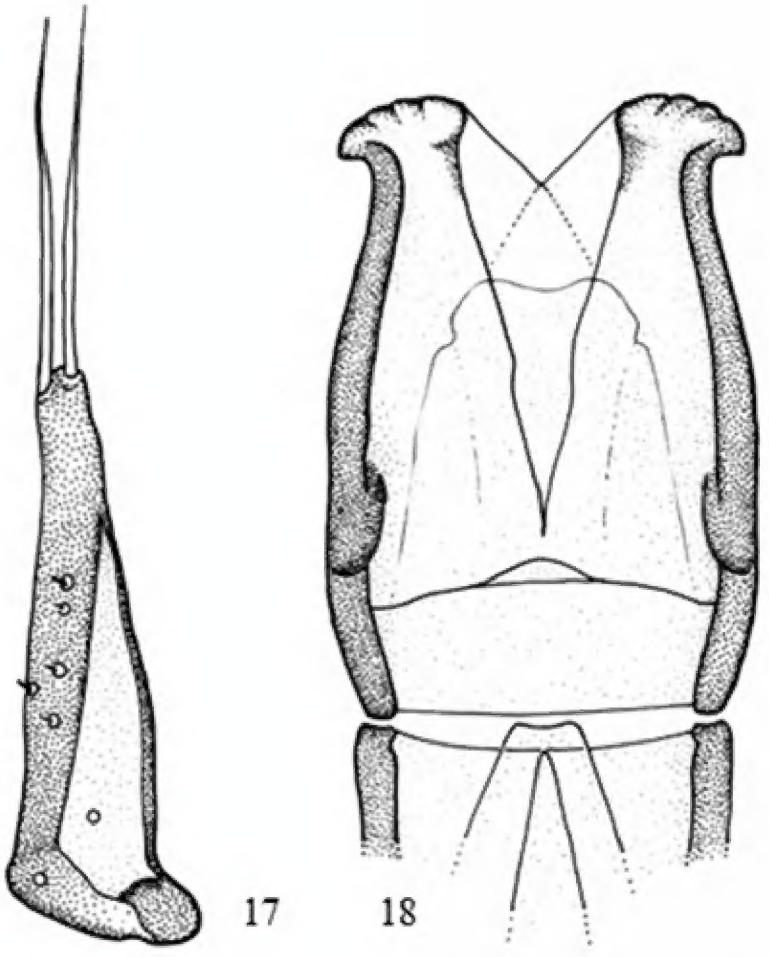

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Figures 14–18. *Micrambe leonardoi*: **14** General view **15** antenna **16** pronotum **17** paramere **18** aedeagus.

***Micrambe madagascariensis* Grouvelle, 1896**
Figures 19–23

Micrambe madagascariensis Grouvelle, 1896; Ann. Soc. entomol. Fr.: 90

Material examined. Paratype ♀. Madagascar; Diego-Suarez; Ch. Alluaud 1893 (white card)/Museum Paris, coll. A. Grouvelle 1915 (blue card)/ *Micrambe madagascariensis*; ex typus; A. Grouvelle (white card) (MNHN). 1 ex, Tananarive, Madagascar/Museum de Paris/ original N. Bruce: C. (*Micrambe*) *madagascariensis*. A label is added indicating *Micrambe madagascariensis* Grouv. (MNHN).

Additional material examined. Madagascar. Tamatave distr., Moramanga env., 24. II-1. III. 1995, 2 ♂♂ (leg. I. Jenis). Nord, Lembonibona, 1265 m, 5 km E Andapa, 2.III. 1996. 2♂♂, 1♀. Est, Ikoka env. Massiv Ambondrombe, 16°16'S; 48°4'E (DDM), 1100–1200 m, 9–10. III. 1996, ♂ (leg. J. Janak and P. Moravec) (MHNG). North, 5 km E Andapa, Lembonibona, 19°16'S; 47°59'E (DDM), 2. III. 1969, 1 ex. Massiv. Anjanaharibe North, sentier Ambodihasina-Ambalarombe, Riv. Andramonta env., 14°20'S; 50°04'E (DDM), 23.II-1.III.1996, 1 ex (leg. J. Janak and P. Moravec) (MHNG). Tananarive, 6–13. X. 1970, 2 exx, on *Senecio* sp. (coll. P. Hammond) (BMNH). Nr. Anjiro, 21. X. 1970, 1 ex (coll. P. Hammond) (BMNH). Fianarantsoa, Forêt Alatsara, 21–22. XI. 2006, 11 exx (leg. Canepari). Beronoo, 40 km S. strada per Antsirabe, 14. XI. 2006, 1 ex (leg. Canepari). Andasibe, Pèrinet, 18,56°S; 48,26°E (DD); 7–8. XI. 1998, 2 ♂♂ y 2 ♀♀ (Leg. R. Müller) (TMSA). Moramanga, Andasive, vic. Anevoca, Forêt pluviale de Marotmitza NR, 950–1150 m; 5–12.XI.2004, 2 ♀♀ (leg. Randriamanaitra). Perinet, 21–22. XII. 2001, 1 ♀ (leg. W. Dolin) (NHMW). Manjakacompo, 5. X. 1989, 1 ♀ (leg. L. Bartolozzi) (MSNF).

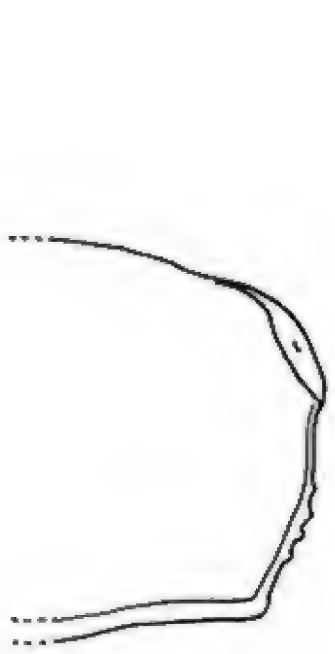
Redescription. Length: 1.4–1.5 mm. Body oval and elongated, slightly convex. Yellowish-brown. Pubescence simple. Metathoracic wings fully developed.

Head. Large eyes (L = 0.122 mm), normal, sub-hemispherical and protruding (E ≥ 1) with facets (E ≥ 1) smaller or as large as head punctures (Ø = 0.09 mm). Long antennae (Fig. 20) (L = 0.543 mm) surpassing the base of the pronotum. 1st antennomere thick and ovoid; 2nd as long as 1st but narrower; 3rd 1.1 times longer than 2nd; 4th, 6th, 7th and 8th almost identical and half as long as 3rd; 9th and 10th transverse.

Pronotum (Figs. 19, 21) convex and slightly transverse (RD = 1.9). Large callosity (1/3 as long as the side), not protruding from the lateral margin of the pronotum. Callosity side clearly visible from above. Gland pore visible. Callosity margin strong. Callosity forming an obtuse angle rearwards and a 26.62–27.99°angle with the body axis. Lateral margins converging towards the base. Posterior angles obtuse. Groove and basal foveae present. Strong and thick punctation, punctures separated by a shorter distance than their diameter (Ø = 0.013–0.016 mm).

Elytra with punctation thinner and more scattered than that of the pronotum. Punctures separated by a distance larger than their diameter (Ø =0.0 11–0.013 mm).

Aedeagus (Fig. 23) (L = 0.153 mm) apically extended. Basal third of lateral margins with a strong protuberance. Endophallic orifice visible. Endophallic armour made



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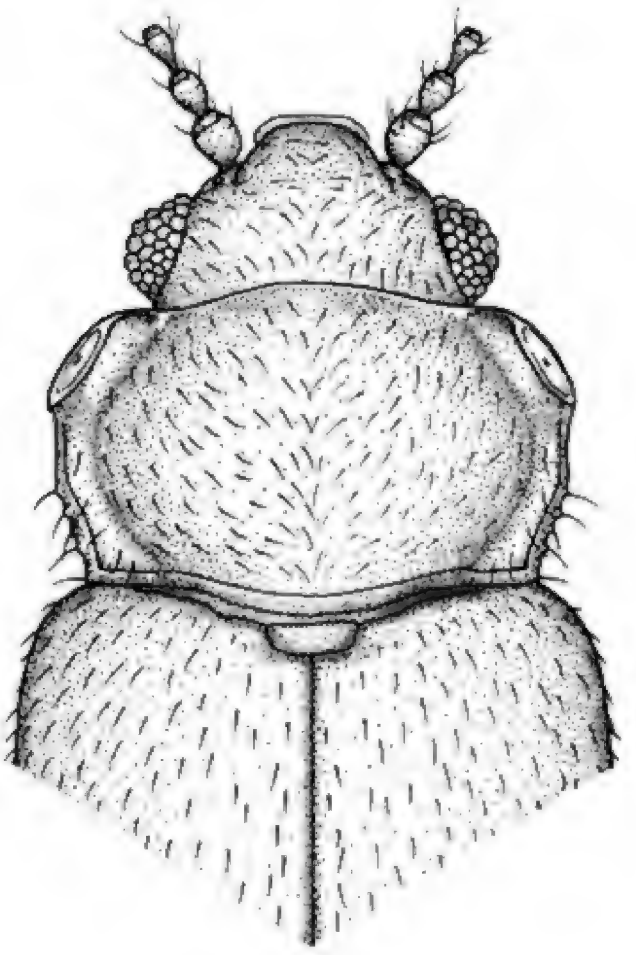

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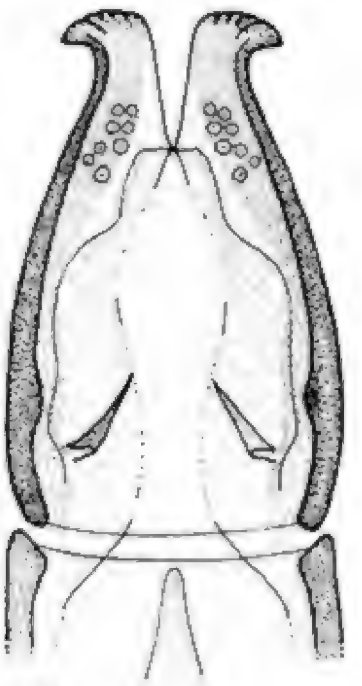

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Figures 19–23. *Micrambe madagascariensis*: **19** General view **20** antenna **21** pronotum **22** paramere **23** aedeagus.

up of minute thorns. Parameres (L = 76.75 μm) (Fig. 22) triangular and very elongated. Two or three apical setae. Few pores with and without setae.

Biology. Some specimens have been captured on *Senecio* sp.

Distribution. Madagascar (Grouvelle 1896); Cameroon (Bruce 1952, 1959).

***Micrambe modesta* (Grouvelle, 1906)**
Figures 24–28

Micrambe modestus Grouvelle, 1906; Ann. Soc. entomol. Fr., 75: 141

Material examined. Madagascar. Fover Panda / Type (red card)/ Museum Paris; coll. A. Grouvelle, 1915 (white card)/ *Micrambe modestus* Grouv.; *Micrambe modesta* (MNHN)

Additional material examined. Madagascar. Andasibe (Perinet); 18°56'S; 48°25'E (DDM); 7.XI.1998, 2 ♂♂ and 2 ♀♀ (leg. R. Muller) (TMSA). Madagascar C. 4 km N. Ambohimahamasoa (forest Fianaratsoa) 1200–1300 m; 22. III. 1996, 1 ♂ (leg. J. Janak and P. Moravec) (MHNG). Nr. Anjiro, 21. X. 1970, 1 ex (coll. P. Hammond) (BMNH).

Redescription. Length: 1.75 mm. Body oblong and convex. Yellowish grey-brown; in some specimens, darker head and pronotum. Simple pubescence, slightly lifted and greyish (L = 0.057–0.070 mm). Metathoracic wings fully developed.

Very transverse head (WL = 2.4–2.5). Pronounced and thick punctation; distance between punctures shorter than puncture diameter (Ø = 0.016–0.020 mm). Eyes conical, asymmetrical and protruding (E = 1.15). Eye facets smaller (Ø = 0.08–0.010 mm) than head punctures. Long antennae (Fig. 25) (L = 0.601 mm). 1st antennomere thick; as long as 2nd, which is ovoid; 4th and 6th identical and 0.7 times as short as 2nd.

Pronotum (Figs 24, 26) slightly transverse (WL = 1.7). Anterior margin slightly rounded. Lateral margins almost parallel until middle area and from there on, converging to the base. Large callosity (1/3 of side length); clearly visible dorsally. Gland pore visible; forming an obtuse angle rearwards and a 30°–32°angle with the body axis. Posterior angles obtuse. Basal groove and foveae present. Punctures pronounced and dense, distance between punctures less than puncture diameter (Ø = 0.012–0.015 mm).

Elytra 3.0 times as long and 1.5 times as wide as the pronotum. Punctation finer and more scattered than that on the pronotum; distance between punctures greater than puncture diameter (Ø = 0.012–0.015 mm).

Aedeagus (Fig. 28) (L = 0.126 mm; A = 0.098 mm) apically extended. Visible endophallic orifice and membranous preputial groove. Protuberance present on the basal third of the lateral margins. Endophallic armour made up of small spines. Triangular parameres (Fig. 27) (L = 0.067–0.068 mm). Numerous pores without setae; bearing two long apical setae (L = 0.040–0.070 mm).

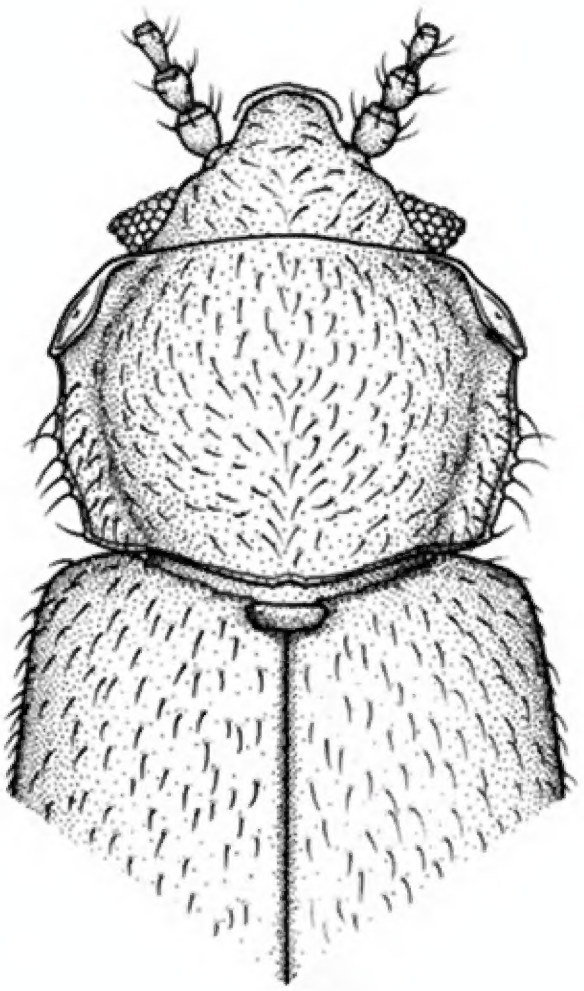
Biology. On *Lobelia* sp.

Distribution. Madagascar (Grouvelle 1906); Congo (Bruce 1959).

***Micrambe reuninensis* Lyubarsky, 2013**
Figs 29–33

Micrambe reuninensis Lyubarsky, 2013; Lat. Entomol., 52: 61

26



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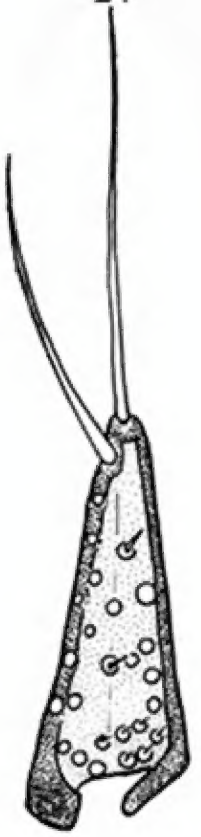

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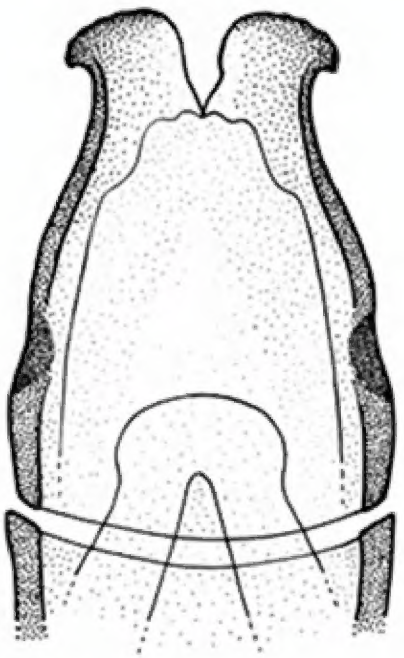


28

Figures 24–28. *Micrambe modesta*: **24** General view **25** antenna **26** pronotum **27** paramere **28** aedeagus.

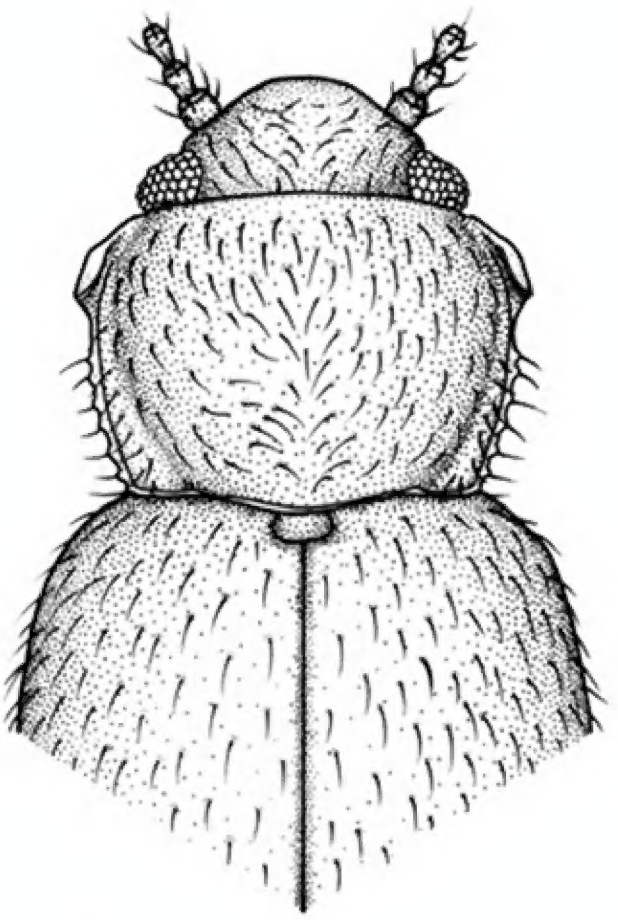
No material examined.

Description (see Lyubarsky 2013).

Biology. Unknown.

Distribution. Réunion Island (Lyubarsky 2013).

31



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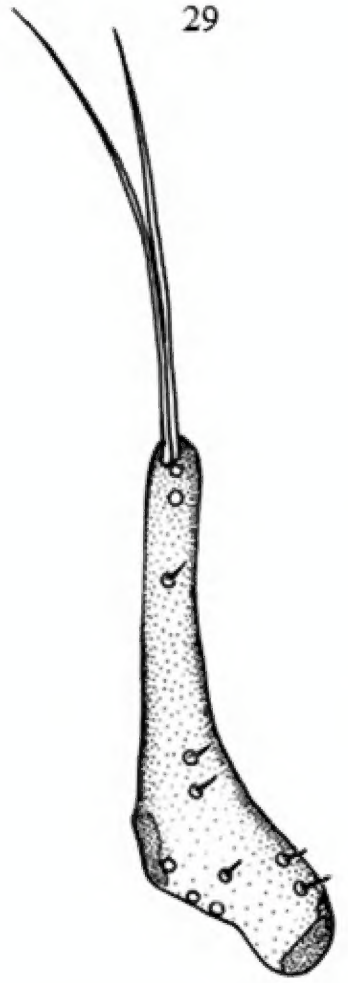

32 33

Figures 29–33. *Micrambe reuninensis*: **29** General view **30** antenna **31** pronotum **32** paramere **33** aedeagus (after Lyubarsky 2013, with changes).

Key to species

1 Simple pubescence. Unicolour antennae **2**

– Double pubescence. 9th and 10th antennomere dark. Large callosity (1/3 of side length); lateral margins in the shape of a regular curve until the base (Figs 1, 3). Aedeagus (Fig. 5) apically extended and widened in its basal half. Parameres (Fig. 4) elongated and triangular. Few pores either with or without setae. Two long apical setae. Length: 1.5–1.6 mm. Madagascar ..... ***apicalis* Grouvelle**

2 Small eyes, protruding (E = 1.0–1.2) and conical. Aedeagus (Fig. 28) apically extended. Visible endophallic orifice and membranous preputial groove; protuberance on the basal third of the lateral margins. Triangular parameres (Fig. 27) (L = 0.067- 0.068 mm). Length: 1.7 mm. Madagascar and Congo ..... ***modesta* (Grouvelle)**

– Normal eyes, sub-hemispherical (Figs 6, 9, 14, 19, 29) **3**

3 Large eyes (L = 0.122 mm), normal, hemispherical and protruding (E ≥ 1). Aedeagus (Fig. 23) apically extended. Basal third of lateral margins with a small protuberance. Endophallic orifice visible. Parameres (Fig. 22) triangular and greatly elongated. Two or three apical setae. Small size: 1.4–1.5 mm. L = 1.4- 1.5 mm. Madagascar and Cameroon ..... ***madagascariensis* Grouvelle**

– Sub-hemispherical eyes. Larger size (≥ 1.5 mm) **4**

4 Very convex body. Yellowish grey-brown..... **5**

– Body little convex. Dark grey-brown or ferruginous colour of head and pronotum. Aedeagus (Fig. 18) apically extended. Preputial sac with a thin membrane. Basal third of lateral margins with a small protuberance. Parameres (Fig. 17). Length: 1.6-2.1 mm. Réunion Island ..... ***leonardoi* sp. n.**

5 Yellowish grey-brown. 4th segment of hind metatarsi small. Aedeagus apically extended. Endophallic orifice visible. Length: 1.9 mm. Madagascar..... ***brevitarsis* Bruce**

– 4th segment of hind tarsi similar in length to the remaining species of the genus **6**

6 Large pronotal callosity (1/3 of side length), barely protruding from the lateral margin of the pronotum (Figs 9, 11). Lateral margins parallel and converging in their last third towards the base. Aedeagus (Fig. 13) apically extended. Endophallic orifice not visible. Parameres (Fig. 12) greatly elongated, triangular. Length: 1.8-2.0 mm. Madagascar, Réunion Island..... ***consors* Grouvelle**

– Smaller pronotal callosities (1/4 of side length), slightly protruding from the lateral margin of the pronotum. Lateral margins in the shape of a regular curve from the callosity to the base (Figs 29, 31). Aedeagus (Fig. 33). Parameres (Fig. 32) elongated and dilated on the base. Length: 1.5-1.9 mm. Réunion Island ..... ***reuninensis* Lyubarsky**

Acknowledgements

I would like to express my gratitude to Drs. R. Booth (BMNH), W. Schawaller (SMNS), I. Löbl (MHNG), A. Taghavian (MNHN), L. Bartolozzi (MSNF), De Coninck ((RMCA), R. Müller (TMSA) and H. Schillhammer (NHMW) for the loan of the material which provided the basis for this study.

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